

Title (en)

COOLING DEVICE FOR USE IN ALTERNATING MAGNETIC FIELDS, COIL ARRANGEMENT, ELECTRIC MACHINE, AND AIRCRAFT

Title (de)

KÜHLVORRICHTUNG ZUR VERWENDUNG IN ALTERNIERENDEN MAGNETFELDERN, SPULEANORDNUNG, ELEKTRISCHE MASCHINE UND FLUGZEUG

Title (fr)

DISPOSITIF DE REFROIDISSEMENT DESTINÉ À ÊTRE UTILISÉ DANS DES CHAMPS MAGNÉTIQUES ALTERNATIFS, AGENCEMENT DE BOBINE, MACHINE ÉLECTRIQUE ET AÉRONEF

Publication

**EP 3907863 A1 20211110 (EN)**

Application

**EP 21171929 A 20210504**

Priority

DE 102020112591 A 20200508

Abstract (en)

A cooling device for use in alternating magnetic fields may include an evaporator part defining a first volume for evaporating a cooling medium contained therein, the evaporator part being made of an electrically and magnetically non-conductive material, and a condenser part defining a second volume for condensing the cooling medium contained therein, the condenser part being in fluid connection with the first volume.

IPC 8 full level

**H02K 9/22** (2006.01); **F28D 15/02** (2006.01)

CPC (source: CN EP US)

**B64D 27/24** (2013.01 - US); **F28D 15/02** (2013.01 - CN); **F28D 15/0275** (2013.01 - EP); **H02K 3/24** (2013.01 - US); **H02K 5/203** (2021.01 - CN); **H02K 9/20** (2013.01 - CN US); **H02K 9/225** (2021.01 - EP US); **H05K 7/20309** (2013.01 - US); **H05K 7/20318** (2013.01 - US); **H05K 7/20336** (2013.01 - US)

Citation (applicant)

- WO 2017076684 A1 20170511 - BAYERISCHE MOTOREN WERKE AG [DE]
- US 2014368064 A1 20141218 - FEDOSEYEV LEV [US], et al
- US 4240000 A 19801216 - HARANO KEIICHI [JP], et al
- DE 10258778 A1 20040722 - SIEMENS AG [DE]

Citation (search report)

- [XY] DE 102018210985 A1 20200109 - AUDI AG [DE]
- [XI] EP 3569960 A2 20191120 - GEN ELECTRIC [US]
- [X] WO 2018060011 A1 20180405 - SIEMENS AG [DE]
- [Y] WO 2016058966 A1 20160421 - EURO HEAT PIPES [BE]
- [Y] US 6536510 B2 20030325 - KHRUSTALEV DMITRY [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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US 2021351666 A1 20211111

DOCDB simple family (application)

**EP 21171929 A 20210504**; CN 202110500845 A 20210508; DE 102020112591 A 20200508; US 202117314459 A 20210507